



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER OF PATENTS AND TRADEMARKS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
[www.uspto.gov](http://www.uspto.gov)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/692,135	10/19/2000	Roy C. Challberg	24-AT-5990	6878

7590                    06/04/2003

John S Beulick  
Armstrong Teasdale LLP  
One Metropolitan Square  
Suite 2600  
St Louis, MO 63102-2740

[REDACTED] EXAMINER

RICHARDSON, JOHN A

ART UNIT	PAPER NUMBER
3641	

DATE MAILED: 06/04/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>
	09/692,135	CHALLBERG, ROY C.
	<b>Examiner</b>	<b>Art Unit</b>
	John Richardson	3641

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) Responsive to communication(s) filed on 17 March 2003.
- 2a) This action is FINAL.                    2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) Claim(s) 1 to 16 is/are pending in the application.
- 4a) Of the above claim(s) 5 and 13 is/are withdrawn from consideration.
- 5) Claim(s) \_\_\_\_\_ is/are allowed.
- 6) Claim(s) 1 to 4, 6 to 12, 14 to 16 is/are rejected.
- 7) Claim(s) \_\_\_\_\_ is/are objected to.
- 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) The proposed drawing correction filed on \_\_\_\_\_ is: a) approved b) disapproved by the Examiner.  
If approved, corrected drawings are required in reply to this Office action.
- 12) The oath or declaration is objected to by the Examiner.

#### Priority under 35 U.S.C. §§ 119 and 120

- 13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) All b) Some \* c) None of:  
 1. Certified copies of the priority documents have been received.  
 2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).  
a) The translation of the foreign language provisional application has been received.
- 15) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                             | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____  |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)         | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ | 6) <input type="checkbox"/> Other: _____                                    |

**DETAILED ACTION**

***Non Final Rejection***

- 1). The applicant's responses and Paper No. 14 request for continuing examination (RCE), and (Paper No. 15) amending claims 1, 9, are acknowledged.
- 2). The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Art Unit: 3641

3). Claims 1 to 4, 6, 9 to 12, 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dalke et al (U.S. 5,519,746) for the reasons set forth in Office action, Paper No. 10, item 9).

Applicant's arguments filed in Paper No. 15 (pages 5 to 8) have been fully considered but they are not persuasive. Specifically, the examiner's position is as follows:

- In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., **prevent the fuel assembly from being lifted, lifting entire assembly, during refuel and repair procedures, extending through the flat core plate, removed form the reactor core**) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).
- The applicant appears to use the argument that the invention defines over the cited reference fails to disclose an **fuel supports that extend through the fuel assembly support / core plate** (see for example, page 5, lines 5, 12, 13, page 7, lines 7, 8, page 9, lines 3, 13). The examiner contends that the cited prior art Dalke et al, discloses a combined support structure (items 40, 42, 140, 142) capable of being formed in an integral unit that extends through the core plate (see for example, Figure 4, item P, Figure 9, item P').
- In response the applicant's arguments that the cited prior art, Dalke et al, fails to disclose an apparatus that is capable of being **removed** from the reactor core

Art Unit: 3641

(see Paper No. 15, pages 6, lines 11 to 22, page 7, lines 1 to 4), it is the examiner's position that a) the applicant's claims to not recite the capability for removal, b) the Dalke et al reference clearly discloses that the interfaces between the between item 40, is surrounded by seating surfaces items 74, 76 (Column 5, line 9), and mating surfaces items 78, 80 (Column 5, line 10) providing for apparatus item 14 removal.

- The applicant states on page 8, lines 1 to 4, **The applicant submits that if the support cups were the equivalent of support beams, the support cups are fixed to the top of the core plate and that the core plate is not positioned on top of these support cups.** It is not clear whether the applicant is suggesting two alternative support beam configurations, such as a) supports located on top of the core plate and b) the core plate on top of the supports. The amended claims 1, 9 do not cite whether the plurality of beam supports are located above or below the core support plate. In any event, it is the examiner's position that the Dalke et al, items 42 are capable of providing a plurality of weight support means as part of the core plate assembly structure.

Accordingly, claims 1 to 4, 6, 9 to 12 are rejected for the reasons set forth above and for those set forth in Office action Paper No. 10, item 9).

Art Unit: 3641

4). Claims 7, 8, 15, 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dalke et al (U.S. 5,519,746) as applied to claims 1 to 4, 6, 9 to 12, 14, in further view of Hirukawa (U.S. 5,267,286) for the reasons set forth in Office action, paper No. 10, item 10).

Applicant's arguments filed in Paper No. 15 have been fully considered but they are not persuasive.

- In response to applicant's argument that the cited prior references are based on a "template" considerations (pages 5, 8 of Paper No. 15), the test for obviousness is not whether the features of a secondary reference may be bodily incorporated into the structure of the primary reference; nor is it that the claimed invention must be expressly suggested in any one or all of the references. Rather, the test is what the combined teachings of the references would have suggested to those of ordinary skill in the art. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981).
- In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., **flat core plate**) are not recited in the rejected claims. Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).
- With reference to the applicant's arguments relating the capability of the cited prior art to disclose features of a fuel supports passing through a core plate and

Art Unit: 3641

b) to plurality of support beams, the applicant is directed to the responses enumerated in item 3) above.

Accordingly claims 7, 8, 15, 16 are rejected for the reasons set forth above and for those set forth in Office action Paper 10, item 10).

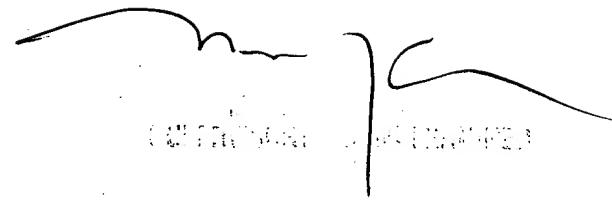
5). Any inquiry concerning this communication or earlier communications from the examiner should be directed to John Richardson whose telephone number is (703) 305 0764. The examiner can normally be reached on Monday to Thursday from 7.00 AM to 4.30 PM. The examiner can also be reached on alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Carone, can be reached on (703) 306 4198. The fax phone number for the organization where this application or proceeding is assigned is (703) 305 7687.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308 1113.

John Richardson, PE,

May 27 2003.



A handwritten signature consisting of two stylized, cursive lines forming a bracket-like shape. Inside the bracket, the words "JANET M. WILSON" are written in a smaller, printed font.